## AMENDMENTS TO THE CLAIMS

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

10.    (currently amended): An automatic programming method having an NC creation program-editing function for editing an NC creation program including a plurality of machining units and a machining program for each machining unit by using a program editing screen,

the program editing screen including:

a machining shape tree on which a plurality of machining unit names indicating a machining shape of the machining unit, as a unit of machining in which continuous machining is performed with the same main spindle and with the same tool, is displayed hierarchically according to a machining order;

a program tree on which a plurality of machining program names relating to the respective machining units is displayed hierarchically according to the machining order;

an editor section in which machining unit data corresponding to one of the machining unit names specified on the machining shape tree including machining shape information indicating the machining shape and machining content data indicating machining contents, and the machining program corresponding to one of the machining program names specified on the program tree are displayed to perform editing; and

a model display section in which a product model, a work model, and a machining shape model corresponding to the specified machining unit are displayed three-dimensionally, comprising:

automatically inserting machining shape information corresponding to a specified shape

element required for forming the machining unit data with respect to the machining shape model

displayed in the model display section in a cursor position specified in the editor section,

wherein the inserted machining shape information comprises shape of the machining unit

that machines the work model into the product model and machining program executable by the

machining unit.

11.     (previously presented): The automatic programming method according to claim

10, wherein the inserting includes inserting machining unit data corresponding to the machining

unit relating to the machining shape model specified in the model display section at the cursor

position.

12.     (previously presented): The automatic programming method according to claim

10, further comprising displaying the machining shape model of a machining unit corresponding

to the cursor position in the editor section in highlighted manner on any one of the product model

and the work model or both displayed in the model display section.

13.     (previously presented): An automatic programming method having an NC

creation program editing function for editing an NC creation program including a plurality of

machining units and a machining program for each machining unit, by using a program editing

screen having a machining shape tree on which a plurality of machining unit names is displayed

hierarchically according to a machining order, a program tree on which a plurality of machining

program names relating to the respective machining units is displayed hierarchically according to

the machining order, a model display section in which any one of a product model and a work model or both is displayed, and an editor section in which machining unit data corresponding to one of the machining unit names specified on the machining shape tree or the machining program corresponding to one of the machining program names specified on the program tree is displayed to perform editing, comprising:

inserting a machining program name corresponding to the specified machining unit name in an insertion position specified in the program tree, and inserting a machining program corresponding to the specified machining unit name in an insertion position specified in the editor section.

14.     (currently amended): A computer-readable recording medium that stores therein a computer program that causes a computer to execute an automatic programming method having an NC creation program-editing function for editing an NC creation program including a plurality of machining units and a machining program for each machining unit, by using a program editing screen having a machining shape tree on which a plurality of machining unit names is displayed hierarchically according to a machining order, a program tree on which a plurality of machining program names relating to the respective machining units is displayed hierarchically according to the machining order, a model display section in which any one of a product model and a work model or both is displayed, and an editor section in which machining unit data corresponding to one of the machining unit names specified on the machining shape tree or the machining program corresponding to one of the machining program names specified on the program tree is displayed to perform editing, the computer program causing the computer to execute:

displaying a machining unit corresponding to a cursor position in the editor section in an

emphasized manner and displaying at substantially same time in the display section any at least

one of the product model and the work model in an emphasized manner indicating a connection

of the displayed machining unit to the displayed at least one of the product model and the work

modelor both displayed in the model display section in highlighted manner.


15.     (currently amended): A computer-readable recording medium that stores therein a

computer program that causes a computer to execute an automatic programming method having

an NC creation program editing function for editing an NC creation program including a

plurality of machining units and a machining program for each machining unit, by using a

program editing screen having a machining shape tree on which a plurality of machining unit

names is displayed hierarchically according to a machining order, a program tree on which a

plurality of machining program names relating to the respective machining units is displayed

hierarchically according to the machining order, a model display section in which any one of a

product model and a work model or both is displayed, and an editor section in which machining

unit data corresponding to one of the machining unit names specified on the machining shape

tree or the machining program corresponding to one of the machining program names specified

on the program tree is displayed to perform editing, the computer program causing the computer

to execute:

automatically inserting machining unit data corresponding to the machining unit selected

in the model display section in a position specified in the editor section,

wherein the inserted machining unit data comprises machining program executable by the

machining unit selected in the model display section.

16.     (currently amended): An automatic programming device comprising:

a display controller that displays a program editing screen having a machining shape tree

on which a plurality of machining unit names indicating a machining shape of the machining

unit, as a unit of machining in which continuous machining is performed with the same main

spindle and with the same tool, is displayed hierarchically according to a machining order, a

program tree on which a plurality of machining program names relating to the respective

machining units is displayed hierarchically according to the machining order, an editor section in

which machining unit data corresponding to one of the machining unit names specified on the

machining shape tree including machining shape information indicating the machining shape and

machining content data indicating machining contents, and the machining program

corresponding to one of the machining program names specified on the program tree are

displayed to perform editing, and a model display section in which a product model, a work

model, and a machining shape model corresponding to the specified machining unit are

displayed three-dimensionally; and

an NC creation program editor that edits an NC creation program including a plurality of

machining units and a machining program for each machining unit, based on an input to the

program editing screen,

wherein the display controller automatically inserts machining shape information

corresponding to a specified shape element required for forming the machining unit data with

respect to the machining shape model displayed in the model display section in a cursor position

specified in the editor section,

wherein the inserted machining shape information comprises shape of the machining unit

that machines the work model into the product model and machining program executable by the

machining unit.


17.    (previously presented): The automatic programming device according to claim 16,

wherein the display controller inserts machining unit data corresponding to a machining unit

relating to the machining shape model specified in the model display section in the cursor

position.


18.    (previously presented): The automatic programming device according to claim 16,

wherein the display controller displays the machining shape model of a machining unit

corresponding to the cursor position in the editor section in highlighted manner on any one of the

product model and the work model or both displayed in the model display section.


19.    (previously presented): An automatic programming device comprising:

a display controller that displays a program editing screen having a machining shape tree

on which a plurality of machining unit names is displayed hierarchically according to a

machining order, a program tree on which a plurality of machining program names relating to the

respective machining units is displayed hierarchically according to the machining order, a model

display section in which any one of a product model and a work model or both is displayed, and

an editor section in which machining unit data corresponding to one of the machining unit names

specified on the machining shape tree or the machining program corresponding to one of the

machining program names specified on the program tree is displayed to perform editing;

an NC creation program editor that edits an NC creation program including a plurality of

machining units and a machining program for each machining unit, based on an input to the

program editing screen; and

an insertion unit that inserts a machining program name corresponding to the specified

machining unit name in an insertion position specified on the program tree, and inserts a

machining program corresponding to the specified machining unit name in an insertion position

specified in the editor section.


20. (previously presented):  The automation programming method according to claim 10,

wherein the specified shape element is selected in the model display section, wherein the

machining shape information is automatically matched to the selected specified shape element,

and wherein the machining shape information is shape data for a specified machining unit.


21. (currently amended): The automation programming method according to claim 10,

wherein inserting of the machining shape information comprises automatically inserting a name

of the selected specified shape element and corresponding machine code for the a corresponding

machining unit in the editor section displayed at substantially same time with the machining

shape tree where the specified shape element is selected.


22. (previously presented):  The computer-readable recording medium according to

claim 15, wherein the specified shape element is selected in the model display section, wherein

the machining shape information is automatically matched to the selected specified shape

element, and wherein the machining shape information is shape data for a specified machining

unit.

23. (currently amended): The computer-readable recording medium according to claim

15, wherein inserting of the machining shape information comprises automatically inserting a

name of the selected specified shape element and corresponding machine code for the a

corresponding machining unit in the editor section displayed at substantially same time with the

machining shape tree where the specified shape element is selected.